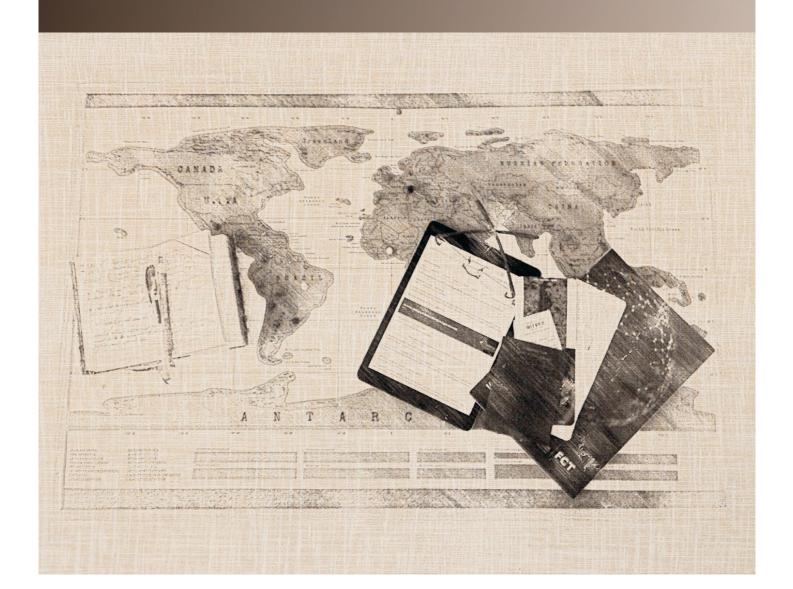
Thais França and Beatriz Padilla (editors)

# TRANSNATIONAL SCIENTIFIC MOBILITY

Perspectives from the North and the South



### Transnational Scientific Mobility

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Thais França e Beatriz Padilla (eds.)

# TRANSNATIONAL SCIENTIFIC MOBILITY

PERSPECTIVES FROM THE NORTH AND THE SOUTH

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# Index

Inde	x of figures and tables	Vii
	Presentación	ix
	Introduction	1
1	Scientific Mobility to Portugal. Production and circulation of knowledge in highly-skilled migration — Preliminary Results  Thais França and Beatriz Padilla	7
2	Brains and bodies on the move. A research agenda on precarious researchers' mobility	57
3	Transmobility — A Cosmopolitan Process? Discriminations & Auto-discriminations of/by Transnational Professionals in the Research and Academia World	91
4	Academic Mobility. Lessons and Opportunities Liudmila Kirpitchenko	117
5	Repensando las perspectivas teóricas y categorías de análisis de la migración calificada desde el caso de Ecuador	143
6	La cooperación universitaria entre universidades mexicanas y asiáticas.  De la movilidad a la vinculación	157

7	Mujeres profesionales en San Carlos de Bariloche. Movilidades científicas y trayectorias académicas	187
8	Fuga, circulación, intercambio y ganancia de cerebros. Una mirada preliminar de los migrantes que se dirigieron a EE.UU. y regresaron a Argentina	215
9	Escenarios de movilidad académica en pareja. Negociando afectos, dinero y carrera profesional en el marco de las políticas científica en Colombia	231
10	A educação Superior como um ativo econômico global. Os casos da Austrália, Canadá, Nova Zelândia e Reino Unido	253

# **Index of figures e tables**

## Figures

1.1	Region of Origin	25
1.2	International academic and scientific mobility to Portugal evolution (1970-2015-%)	27
1.3	Reasons for coming to Portugal	29
1.4	Self-perception of integration level	32
1.5	General evaluation of the scientific mobility experience in Portugal	34
7.1 7.2	Ubicación de los primeros parques nacionales en la Argentina Ubicación del Centro Atómico Bariloche y barrio Pinar de Festa	192
7.3	respecto al área central de San Carlos de Bariloche	200
7.0	desplazamientos para el caso-ejemplo de María	202
7.4	Segunda trayectoria modelo, formación mayor fuera del CAB IB	
	— mapa de desplazamientos para el caso-ejemplo de Alicia	204
	Tables	
1.1	Legislation regulation on skilled-migration in Portugal	14
1.2	Survey International Scientists and scholars' profile (in %)	24
1.3	Sources of funding	28
1.4	Advantages of Choosing Portugal (%)	30
1.5	Disadvantages of Choosing Portugal (%)	31
1.6	Interviewee's general profile (%)	39
1.7	Analysed Interviewee's profile	40
2.1	Dimensions of analysis of scientific mobility	84
6.1	Convenios firmados en el ámbito de cooperación académica	
	y científica entre México y países asiáticos, 2007-2012	173
10.1	Crescimento do número de estudantes de educação superior	
	no mundo	255

10.2	Principais países que enviam estudantes ao exterior (2007)	256
10.3	Principais países anfitriões de estudantes internacionais no	
		257
10.4	Volume do comércio internacional da educação superior do ano	
	2005 a 2007	258

#### Chapter 2

# Brains and bodies on the move A research agenda on precarious researchers' mobility<sup>1</sup>

Chiara Carrozza, Alberta Giorgi and Luca Raffini

**Abstract** Mobility represents a powerful factor of change. It redefines the structures of society and stimulates the re-orientation of identities, the feelings of belonging and the individual social networks. Indeed, mobility provides chances of life improvement but also brings about new risks and produces new inequalities. The EU represents an extraordinary laboratory of mobility and transnationality. This contribution focuses on a particular category of mobile Europeans: precarious situation of academic researchers. Young mobile researchers are part of the "Erasmus Generation" but they are also part of the "Precarious generation" carrying out their work with little security. Both these factors encourage mobility, acting as "pull" and "push" forces.

We critically revise the theories on mobility and the governance of research mobility in EU policies, we analyse the available data on researchers' mobility and finally, and drawing on an original database of interviews with female researchers, we explore the consequences of mobility in the realm of social and romantic relations. We focus, in particular, on the concept of 'Living Apart Relationships' (LAR), that sheds light on an often-overlooked aspect in the 'brain drain/circulation' narratives, which is the fact that researchers, besides brains, have bodies too. We conclude outlining a new research agenda on academic researchers' mobility in Europe that aims to overcome the neoliberal rhetoric on mobility and draw attention to the fact that both brains and bodies are on the move.

**Keywords** scientific mobility, European Union, transnationality, precariousness, LAR.

The paper is the outcome of a common reflection carried out by the authors, starting from two different papers presented at the conference "Researchers Crossing Borders: Transnational Scientific Mobility". The paper "Representing Mobility", presented by Chiara Carrozza, on Panel B I on Scientific Mobility Policies, and the paper "Love and Ryanair: Academic Researchers relocating", written by Alberta Giorgi and Luca Raffini and presented by Alberta Giorgi on Panel III on "Scientific Mobility and Identity". The responsibility can be divided as follows: Chiara Carrozza: sections 2 and 6b; Alberta Giorgi: sections 4 and 5; Luca Raffini: sections 1 and 3. The authors share responsibility for the remaining parts.

Resumo A mobilidade representa um fator de mudança, que redefine as estruturas da sociedade e promove a reorientação das identidades, pertença e redes sociais. A mobilidade oferece oportunidades, mas também traz novos riscos e novas desigualdade. A UE representa um laboratório extraordinário de mobilidade e trans-nacionalidade. A contribuição trabalha sobre uma específica categoria dos europeus móveis: os pesquisadores. Os jovens investigadores móveis são parte da "geração Erasmus" mas eles também são parte da "geração precária". Ambos incentivam a mobilidade, com factores "push/pull".

Nós vamos a rever criticamente as teorias sobre a mobilidade e a governança da mobilidade científica nas políticas da UE, analisamos os dados disponíveis sobre a mobilidade académica e, com base em um banco de dados originais de entrevistas em profundidade com mulheres investigadoras, vamos explorar as consequências da mobilidade nas relações românticas. Nós nos concentramos, em particular, sobre o conceito de "Living Apart Relationships" (LAR), que permite de observar um aspecto muitas vezes negligenciado nas narrativas das "fuga/circulação de cérebros": os pesquisadores, além de cérebros, têm corpos também. Nós concluímos delineando uma nova agenda de pesquisa sobre a mobilidade académica na Europa.

**Palavras-chave** mobilidade científica, União Europeia, transnacionalidade, precariedade, LAR.

#### Introduction

In this paper we propose a research agenda on researchers' mobility that takes into account the multiple aspects and dimensions of their mobility experience. Mobility is a complex phenomenon, changing every aspects of social life (Elliott and Urry 2008; Castells 2010). Mobility does not only impact professional careers, but also social and romantic relations, cultural consumption and political behaviours. We focus on academic researcher's mobility (Cantwell 2009; Leeman 2010; Jons 2011; Vohlídalová 2014). Academic mobility is usually deemed to positively affect the researchers' professional and social opportunities (with some nuances, depending on the mobility strategies, see Veugelers and Van Bouwel 2015). Yet, and even more in times of growing precariousness and uncertainty, mobility may also bring about multiple risks and uncertainty. Our interest is to nuance the concept of mobility, as an opportunity for individual development and as a carrier of transnationalization and horizontal Europeanization, in order to embrace a complex and multidimensional approach to mobility. We aim to combine the literature on mobility of high skilled workers and the literature on precarity, underlying the complex interplay of push and pull factors in the researchers' experiences of intra-European

mobility. Making reference to the six patterns of academic mobility identified by Hoffman (2009), we explore rationales, characteristics and individual consequences of the "emerging forms of academic mobility" (ibid.), and, in particular, the kind of multidimensional academic mobility characterizing the trajectories of the younger generations. The goal is to understand the consequences of mobility in the life of mobile academic researchers, in their relationships, in their emotional ties with a specific territory, and analysing how mobile researchers continuously redefine and negotiate their time and their spaces, and which strategies they employ to conciliate private and professional trajectories. The outcomes call for a new research agenda on academic researchers' mobility, based on a critical revision of some theoretical assumptions, including the 'brain drain/circulation' narrative (Cervantes and Guellec, 2002) and the mechanisms of 'Europeanization from below' (Eigmüller, 2013). In this contribution, we first analyse the category of mobility in the scientific literature (section 1), paying specific attention to researchers' mobility. Then, we analyse the EU policies fostering mobility (section 2), and we critically revise the available data (section 3). Finally, we explore the individual experiences of mobile researchers, drawing on an original empirical analysis carried out conducting biographical interviews with young mobile female researchers (section 4), analysing how mobile researchers manage their long-distance relationships (section 5). In the concluding section we discuss the multifaceted nature of mobility and we propose a research agenda.

#### Framing mobility: new liberty, new myth

The opportunities, risks, and rhetoric that characterize academic researchers' mobility (Ackers and Gill, 2008; Cantwell, 2009; Leeman, 2010; Jons, 2011; Oliver, 2012; Vohlídalová, 2014) can be better understood if framed in the more general context of the "mobility turn" (Urry, 2008). Mobility represents a powerful factor of change, along with globalization and the individualization processes, that redefines the structures of society and every-day interaction (Castells, 2010). Social experience is progressively detached from the physical space, and mobility deeply changes "the creation of identities and the micro geographies of everyday life" (Cresswell, 2011: 551). The trespassing of borders promotes the reorientation of identities, belonging and social

networks. Due to the increase in both physical and virtual mobility, individuals are more and more involved in transnational networks that connect country of origin and country of settlement (Vertovec, 1999). The weakening of traditional "hard" borders does not means that inequalities disappear. The "network capital" (Elliot and Urry, 2008) adds to, and interacts with, other forms of capital (social, economic and cultural capital), determining the individual chances of mobility, and the consequences and goals of the mobility strategies. Moreover, it influences individual ability to enter plural and rich networks. Freedom to move is not equally distributed among individuals: Favell suggests framing it as a "fourth liberty" (Favell, 2014), that discriminates between who is actually living a novel type of social experience "beyond borders" from "stayers", or from those who experience mobility as an obligation, rather than as a free choice. Bauman (1998) argues that globalization exacerbates the divide between "winners" and "losers". While the former have increasing chances to move, the life of the latter wavers from being confined in a place to be forced to move, to escape from war, poverty, oppression.

Mobility, as one of the core features of global society, is often framed in positive terms, as an opportunity for individuals and for society as a whole. Influenced by the neoliberal humus, the mainstream perspective looks to mobility as an opportunity, an obligation, and a "moral" duty. Mobility becomes the new "myth", or even the new ideology of network society: a secularized ideology, where salvation is not placed in the afterlife, nor in the future, but in "somewhere else" (Elliott and Urry, 2008). Indeed, the age of mobilities is also the "age of migration" (Castles and Miller, 2009), that it is not only made of individuals who made use of:

their free choice to move to the area where they will receive the highest income (...). This harmonious picture often fails to match reality (...). Capitalism has made use of both free and unfree workers in every phase of its development. Labour migrants have frequently been unfree workers, either because they are taken by force to the place where their labour is needed, or because they are denied rights enjoyed by other workers, and cannot therefore compete under equal conditions. Even where migration is voluntary and unregulated, institutional and informal discrimination may limit the real freedom and equality of the workers concerned. (ivi, 71)

The European policy well represents this new approach to mobility as both an opportunity and a duty, an economic and a cultural imperative,

framed by separating the discourse on mobility from the discourse on migration. Intra-EU mobility is actively promoted by the European institutions as an instrument of "horizontal Europeanization" (Mau, 2010), while extra-EU immigration is still represented as a phenomenon to be managed and controlled. This fits well into the so-called liberal paradox, which couples the opening of borders for economic interest with a security minded and defensive orientation. For the European élite, the denationalization of the social experience provides new opportunities for work and leisure, and represents the institutional framework to widen the scope of their social relations. The social experience of lower classes, on the contrary, is still mainly framed inside national borders (Koopmans et al. 2005). For the bulk of EU citizens, the European integration process is lived, more than as an internal change, but as an external threat to economic security and job conditions, to national identity and political sovereignty. Economic crises exacerbate these feeling, nurturing nationalism and anti-European attitudes (Trenz et al., 2015). In addition, the crisis fosters a defensive approach to mobility. Mobility as seen by the lower classes taking the forms of (someone coming to my country who represents a threat to my job, whether from outside or inside the EU) and emigration (me, forced to move to another country for economic reasons).<sup>2</sup>

Yet, intra-EU mobility it is not only made by "Eurostars" (Favell, 2008) and low skilled economic migrants. Although proven that the middle class is still weakly involved in practices of mobility other than tourism and while it is less "denationalized", compared to lower and higher classes (Baglioni and Recchi, 2013), it is, indeed, on the move: therefore, mobility cannot be narrowed to the cosmopolitan, denationalized élite, at the top, and the "Polish plumber", at the bottom. Previous researches have proven that behind this dichotomy Eurostars/Gastarbeiter we can find the more complex and nuanced situation of "middling transnationality" (Conradson and Latham, 2005), made by people that are in between the two ideal-types. A growing share of them experience mobility as a strategy to improve — or defend — their professional and social status, that is, to experience an upward social mobility or to prevent a downward social mobility, undertaking a career in line with their educational credentials and expectations.

This is exemplified by the rise of the extreme-right parties that intensify and mobilize anti-immigration feelings as one of their main tenets (Ignazi 2003).

Mobility of researchers is not a new phenomenon. What is radically new are its characteristics. According to Hoffman (2009), if traditional/conventional forms of academic mobility include national career patterns, ICT-based mobility and short-term exchange and sojourns, new patterns of academic mobility include vertical mobility, lateral mobility and generational mobility. In our analysis we focus in particular on "lateral academic mobility", regarding researchers who "entered the labor force in their current location by crossing a national border for more than a year", while vertical and generational mobility refer to "academic personnel with a migrant background or coming from migrant groups" (Hoffman, 2009: 355-357).

Academic internationalization, and, in particular, transnational academic mobility is a key feature of the "mass university" (Trow 1974). Shaped by neoliberal policies and "market-framed research competition" (Kim, 2009), academic mobility turns to be a new imperative (with various nuances, see Canibano et al., 2011). It is considered a prerequisite to promote competition, to achieve meritocracy (Gornitza and Massen, 2000; Ross, 2009) and to reach excellence and it is actually positively correlated to higher scientific productivity (Veugeleurs and Van Bouwel, 2015).

As stressed by Cantwell (2011), academic mobility can be interpreted both in terms of accidental mobility, forced mobility and negotiated mobility. Indeed, the analysis of the entanglements between these three interpretations of mobility can improve the understanding of academic mobility in times of crisis, where precarity and uncertainty increase. Even highly educated youth and precarious researchers move to escape from the threat of being trapped in a downward mobility and in the 'precariousness trap' (Armano and Murgia, 2014). They are pulled and pushed to move, they find new opportunities but they also exacerbate their uncertainty, in professional and personal life. In a context marked by a generalized deterioration of researchers quality of work and quality of life (Currie and Vidovich, 2009), a "gap of insecurity" affects every-day life (Oliver, 2012). Yet, "on the policy level the negative impact of academic mobility on researchers' lives and especially women's it is usually overlooked and marginalized" (Vohlídalová, 2014).

#### Mobility as a key idea in the Europe of knowledge

If scholars and academics have always been mobile — with some studies estimating that some centuries ago one tenth of academics, or even more, engaged in experiences of scientific mobility (Teichler, 2015:7; see also Scott, 2015:60-61) — it is after the Second World War, and particularly beginning in the 1990s, that internationalisation of the higher education sector jumped to the top of Western political agendas, particularly in Europe, becoming an argument for almost every reform in higher education and science. Scientific mobility is increasingly framed today as a mandatory passage in developing a successful academic career and there is evidence that emerging economies are imitating the European example in promoting scientific mobility (Jacob and Meek, 2013: 341-2).

In this section, we present a preliminary map of the complex assemblage of actors, procedures, funding, programmes, initiatives, events, and services that constitute and materialize the current representation of scientific mobility in the European Union.<sup>3</sup>

The empirical material used to develop this section is a collection of 43 documents related to the governance of scientific mobility in EU research policies;<sup>4</sup> these documents could be generally classified into three different kinds:

- a) general political documents defining the overall political and economical agenda (such as the establishing acts of the European Research Area);
- b) reports on policy implementation (such as the three implementation reports on the 2001 "A Mobility Strategy for the European Research Area")
- c) documents related to initiatives particularly focused on stimulating/supporting scientific mobility and career development (such as the working programmes of the several generations of 'Marie Curie Actions').

<sup>3</sup> See for further analysis on the topic, Ulnicane 2016 and Oliver 2012 (specially pp. 3861-66).

The documents collected run from 2001 to 2013.

#### Mobility in the European Research Area

The development of a socio-technical map of scientific mobility in the European Research Area could start from the definitions emerging from the analysis of this corpus of documents.<sup>5</sup> Mobility represents one of the cornerstones of the ERA project, being closely associated to the first of the key three objectives of the initiative: "the creation of an 'internal market' in research, an area of free movement of knowledge, researchers and technology, with the aim of increasing co-operation, stimulating competition and achieving a better allocation of resources".<sup>6</sup>

Based on the Lisbon Treaty and European Council Conclusions, the same definition of the European Research Area recalls the principle of the internal market: "a unified research area open to the world based on the Internal Market, in which researchers, scientific knowledge and technology circulate freely and through which the Union and its Member States strengthen their scientific and technological bases, their competitiveness and their capacity to collectively address grand challenges".<sup>7</sup>

According to the EU documents, implementing ERA means realizing the 'fifth freedom', the free circulation of researchers and scientific knowledge.

However, beyond programmatic statements, mobility often emerges as instrumental to achieving several aims.

One of these is meeting the demands of knowledge circulation and exchange and fostering effective knowledge-transfer, especially across sectors (inter-sectorial mobility, notably between public research and business).8

In second place, it is strategically important in connecting external and internal dimensions of EU policies, *via* mobility of third

The collection of documents has been analyzed with the support of Dedoose (http://www.dedoose.com/), a web application for mixed methods research and a visual representation of the analysis can be viewed at https://prezi.com/rplhvkl3yq7h/mobility/

<sup>6</sup> European Commission (2002). Communication From The Commission. The European Research Area: Providing New Momentum. Strengthening — Reorienting — Opening up new perspectives. Brussels, 16.10.2002 COM(2002) 565 final.

Furopean Commission (2012). Communication from the Commission to the European Parliament, the Council, the European Economic And Social Committee and the Committee of the Regions. A Reinforced European Research Area Partnership For Excellence And Growth. Brussels, 17.7.2012, COM(2012) 392 final.

European Commission (2008). Challenging Europe's Research: Rationales for the European Research Area (ERA). Report of the ERA Expert Group. EuR 23326. Luxembourg: Office for Official Publications of the European Communities.

country nationals across the external EU borders. The potential of third-country researchers to contribute to the Lisbon's 3% objective is connected to the perception of the risk that the supply of human resources in R&D, and of teachers to train these resources, may become inadequate for future needs. In this respect, "immigration from outside the EU is one source of highly skilled people, and third-country national students and researchers in particular are groups which are increasingly sought after and which the EU needs to actively attract. Third-country national students and researchers can contribute to a pool of well-qualified potential workers and human capital that the EU needs".9 In the same document, allowing third-country nationals to acquire skills and knowledge through a period of training in Europe is conceived as enhancing "brain circulation", which is supposed to benefit both the sending and the receiving countries. Since the 6th Framework Programme, the EU has aimed at making Europe more attractive to the best of third country researchers<sup>10</sup> and, more recently, the establishing act of Horizon 2020<sup>11</sup> stresses that international cooperation with third countries is necessary to effectively address many specific objectives set out in the new funding cycle, essential for frontier and basic research and for addressing societal challenges and instrumental to enhancing the competitiveness of European industry.

Starting from the Communication "The European Research Area: providing new momentum, strengthening, reorienting, opening up new perspectives" (see footnote 6), the Commission noted that the mobility of third country nationals was not yet organized at EU level, with only two Member States in 2002 (France and the United Kingdom) with specific rules regarding the entry of researchers from third countries. In the First and Second Report on Mobility Strategy<sup>12</sup> it was underlined that legal rules or administrative practices were still raising

<sup>9</sup> European Commission (2013). Proposal for a Directive of the European Parliament and of the Councilon of the conditions of entry and residence of third-country nationals for the purposes of research, studies, pupil exchange, remunerated and unremunerated training, voluntary service and aupairing. Brussels, 25.3.2013, COM(2013) 151 final.

Decision No 1513/2002/EC of the EuropeanParliament and of the Council of 27 June 2002 concerning the sixth framework programme of the European Community for research, technological development and demonstration activities, contributing to the creation of the European Research Area and to innovation (2002-2006).

Regulation No 1291/2013 of the European Parliament and of the Council of 11 December 2013 establishing Horizon 2020 — the Framework Programme for Research and Innovation (2014-2020) and repealing Decision No 1982/2006/EC.

obstacles to the entry and stay of third country researchers and their families and that some action was needed to facilitating entry and residence for researchers from third countries. To implement this purpose, the European Union has framed developing country researchers as a specific category of immigrants, adopting the so-called Scientific Visa package (see Cerna and Chou, 2014 for extensive discussion). With this instrument, the EU has intended to link the common EU visa policy for short stays, Member States' national policies concerning long stays and the overarching framework of the EU external migration and asylum policy.

This package of instruments comprises a directive (2005/71/EC) and two recommendations (2005/762/EC and 2005/761/EC), creating a specific residence permit for third country researchers independently of their contractual status. The directive provides for a fast-track procedure for the "admission" (entry for more than three months to the European Community) of third country researchers. In this scheme, accredited research organizations certify the status of the researchers with a "hosting agreement" which acknowledges the existence of a valid research project, as well as the possession by the researcher of the scientific skills, financial means and health insurance. On the basis of this hosting agreement, the migration authorities of the host country can rapidly (in 30 days) issue the residence permit to the researcher. Once a residence permit is granted the researcher will be free to move within Europe for the purpose of the scientific project.<sup>13</sup> Researchers will also have the possibility of submitting applications for residence permits directly to the authorities of the host Member State, if they are legally resident in that country. Moreover, in order to extend the stay in another Member State, it will not be necessary for researchers to return to their country of origin to submit an application.

The European Commission proposed on 25 March 2013 a new visa directive for working periods exceeding three months — which is

European Commission (2003), Commission Staff Working Paper. First Implementation Report on "A Mobility Strategy for the European Research Area". Brussels, 4.2.2003, SEC(2003) 146; European Commission (2004), Commission Staff Working Paper. Second Implementation Report on "A Mobility Strategy for the European Research Area". Brussels, SEC(2004) 412.

European Commission (2005), Commission Staff Working Paper. Third Implementation Report on "A Mobility Strategy for the European Research Area". Brussels, 6.4.2005, SEC(2005) 474.

expected to be in force in 2016 — with the aim of overcoming remaining obstacles non EU researchers have to face when they want to come to Europe for research purposes.

In third place, the promotion of transnational mobility is framed as a simple, effective and powerful mean of boosting European excellence as a whole. In this respect, mobility is approached as a way to train skilled workers, optimize research results and build networks between the institutions among which the researchers circulate.

The frame of 'excellence' in EU research policy (excellence is indeed one of the key ideas in ERA initiative, emerging in particular from 2007 onwards, see Ulnicane 2015) is connected to the constant concern of global competition. In the documents revised, Europe is constantly described as lagging behind its historical competitors — USA and Japan — and as threatened by emerging ones. 14 The lack of comprehensive statistics about mobility of researchers in the majority of Member States, even in countries with regular collection of information and nation-wide registers, emerges as a related concern. 15 An initiative in this respect has been the project "Human Resources in Research & Development: Integrated Information System on the Career Paths and Mobility Flows of Researchers" (IISER) (see, on this and other initiatives on mobility statistics, the Third implementation Report on the Mobility Strategy).

The main instrument to promote excellence through scientific mobility in Europe is represented by structured mobility schemes for researchers. The European Commission has been supporting the mobility of junior researchers since the 1960s under changing names,

See, for example, the following documents: European Commission (2002). Communication From The Commission. The European Research Area: Providing New Momentum. Strengthening — Reorienting — Opening up new perspectives. Brussels, 16.10.2002 COM(2002) 565 final; European Commission (2000). Communication from the Commission to the Council, the European Parliament, the Economic and Social Committee and the Committee of the Regions. Towards a European Research Area. Brussels 18.1.2000. COM(2000)6 final; European Commission (2013). Proposal for a Directive of the European Parliament and of the Councilon the conditions of entry and residence of third-country nationals for the purposes of research, studies, pupilexchange, remunerated and unremunerated training, voluntary service and aupairing. Brussels, 25.3.2013, COM(2013) 151 final; European Commission (2001). Communication from the Commission to the Council and the European Parliament. A Mobility Strategy For The European Research Area. Brussels, 20.06.2001. COM(2001) 331 final.

European Commission (2001). Communication from the Commission to the Council and the European Parliament. A Mobility Strategy For The European Research Area. Brussels, 20.06.2001. COM(2001) 331 final).

from 'Sectoral Grants' initially to the several generations of 'Marie Curie' grants (Teichler, 2015: 16), launched with its first edition in 1996. Marie Curie Actions (MCA) represents an effort to enhance the human resource dimension in science, and more particularly, the values of mobility. From one funding cycle to another, the budget allocated this particular initiative to be constantly raised; for example, in the Seventh Framework Programme the overall budget (for the 'People' programme) came to more than euros 4,7 billion over a seven year period until 2013, representing a 50% increase on average as compared to FP6.<sup>16</sup>

While the specific regulations changed slightly from one funding cycle to the other, the key rule of the MCA stays the same: researchers receive funding on the condition that they move from one country to another to broaden or deepen their competencies.<sup>17</sup>

#### Accompanying measures

While funding hundreds of researchers moving across Europe, the EU has also implemented a set of accompanying measures, with a view to removing obstacles to mobility and to enhancing the career perspective of researchers in Europe. These accompanying measures relate mostly to two kinds of issues: a) career and b) social security rights and fiscal issues.

As for career, the Commission has often claimed that the way in which research careers are structured and organised in Europe does not allow Europe to fully exploit its potential in this field.<sup>19</sup> In particular, 'the lack of transparent, open and merit-based recruitment [...] makes research careers less attractive and hampers mobility, gender equality and research performance'.<sup>20</sup> The Commission has expressed

European Commission (2007). Working Programme People 2007. Decision C(2007)3123 of 29 June 2007.

European Commission (European Commission (2014). Horizon 2020. Work Programme 2014-2015. Marie Sklodowska-Curie Actions. Decision C (2014)4995 of 22 July 2014.

European Commission (European Commission (2014). Horizon 2020. Work Programme 2014-2015. Marie Sklodowska-Curie Actions. Decision C (2014)4995 of 22 July 2014.

European Commission (2003). Communication From the Commission to the Council and the European Parliament. Researchers in the European Research Area: one profession, multiple careers. Brussels, July 2003, COM (2003) 436 final.

<sup>20</sup> European Commission (2012). Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. A Reinforced European Research Area Partnership for Excellence and Growth. Brussels, 17.7.2012. COM(2012) 392 final.

concerns because mobility is often not sufficiently appreciated by the local research labour markets/systems: "for researchers without a permanent position, there is a fear of being left 'out of the system' if they go abroad. Researchers who have been away from their national research system for some years often have difficulties in obtaining a position on the return home. For more established researchers, a leave of absence can be a disadvantage to career advancement. The research undertaken abroad or in another sector may not be adequately appreciated. Researchers who move with the intention of a long-term stay in another country have often to 'start from the beginning' in the new country: they may lose the recognition and social status they have had".21 Studies (see, for example, Musselin, 2004) found that for postdoctoral researchers, employers were keen to attract the best candidates from abroad while not expecting them to stay or encouraging them to do so. In general, the role of mobility for promotion/hiring is affected by the different local labour markets for academics. Systems designed around the provision of stable employment — which is the case for most of Europe - has been found to be more oriented to endorse immobility because of the importance of local networks in increasing the chances to be hired and promoted (Cruz and Sanz, 2010; Stephan, 2012; see also Lawson and Shibayama, 2015 for a review on the topic).

A specific initiative in this respect, although with a limited impact, is the "The EU Charter for Researchers", launched by the Commission in 2005, that includes two articles related to mobility: "Value of mobility" and "Recognition of mobility experience". Also been the Researcher's Mobility Web Portal has been created, offering contents and services related to job opportunities and grants offered by the different actors of the European Research Community (Universities, Industry, Foundations, etc.) as well as information about administrative and legal issues. A tailored and customised help desk-function has been created through the constitution of the European Network of Mobility Centres.<sup>22</sup> These two initiatives were combined, in 2008, into the EURAXESS (http://ec.europa.eu/euraxess/index.cfm) 'Researchers in

European Commission (2001). Communication from the Commission to the Council and the European Parliament. A Mobility Strategy For The European Research Area. Brussels, 20.06.2001. COM(2001) 331 final.

See the map at https://ec.europa.eu/research/fp6/mariecurie-actions/pdf/eramore\_map\_en.pdf

Motion Network' platform, providing a single point of reference to acquire information.

As for social security rights and fiscal issues, since the initial definition of the Mobility Strategy (2001), the EU has recognized that the differences in the social security systems and levels of taxation among Member States may make mobility unattractive. With respect to health services, since February 2003 the Commission has adopted a Communication on the European Health Insurance Card, presenting a roadmap for its gradual introduction in order to replace the paper forms needed before for access and reimbursement of health care during a temporary stay in a Member State other than that of insurance. Since June 2004, the European Health Insurance Card has provided an effective means to properly deal with issues connected to circulation among different national health systems.

However, in several other aspects different national regulations for social security still show lack of compatibility, and this particularly affects families (for example, with respect to maternity leave, benefits and day-care for children). Mobile researchers often have to pay contributions for benefits they cannot enjoy, nor receive compensation for, as is often the case for unemployment benefits.<sup>23</sup> Previous regulation coordinating social security systems (Council Regulation (EEC) No 1408/71 and its amendments) which was very restrictive for transfer of unemployment benefits, has been replaced in 2004, with the adoption of the Regulation 883/2004 simplifying and improving the coordination of social security schemes. Together with the Implementing Regulation 987/2009, this legislative package is referred to as "modernized coordination" of social security systems.

Transferability of supplementary pension rights is one of the issue in this area that deserve the greatest attention according to the EU, since in some Member States researchers have to remain with the same employer for many years before being entitled to a supplementary pension. If the researcher has to move before that period, he/she will not have acquired any pension rights. These topics have been the subject of some initiatives: the improved portability of occupational pension rights has been the subject of two Commission consultations addressed to the European social partners in June 2002 and September

<sup>23</sup> High-Level Expert Group on Improving Mobility of Researchers. Final Report. 4 April 2001

2003 and of a legislative initiative in this field in 2003 (Directive 2003/41/EC, enabling the setup of one pension vehicle for employees from different countries). The Commission has also more recently proposed a directive laying out the possibility of acquiring pension rights even for short periods and keeping pension entitlements by transferring them to a new scheme in the event of professional mobility, and in June 2013 the Council has endorsed this proposal of directive.

As for fiscal issues, bilateral taxation agreements are missing in some relevant countries, introducing the risk of double taxation, including the double taxation of pensions (see the Second Implementation Report). The DG Research has proposed a detailed set of initiatives at legislative, administrative and practical level, to be implemented by the Member States under the OMC (Open Method of Coordination) to minimize the differences of taxation regimes within and between Member States for the same kind of contracts/fellowships, and the simplification of the administrative procedures. However, it has been recognized that it is unrealistic to imagine harmonization of the taxation regime for researchers throughout Europe (see the Third Implementation Report). Efforts in this area will remain focused on the strategy of better informing researchers when they move across countries.

# The mobility of an academic researcher in Europe between pull and push factors

Despite being so prominent in international agendas, objects of a wide stream of studies and the key element of the complex infrastructure described in the previous section, there still remain many "grey areas" — things that we don't know — on scientific mobility.

However, recent analysis has led to complaints, in particular, the scarcity and poor quality of the factual data available (Minneci, 2015; Teichler, 2015; Teichler and Cavalli, 2015), particularly highlighting the plurality of ways of defining, classifying and measuring the "components" of scientific mobility in the available datasets, which limits comparison and elaboration of data. Despite the limitations mentioned, available data on academic mobility show evidence that intra-EU mobility is growing and that higher education and academic research sectors are highly Europeanized. Higher education and academic research seem to actually represent a field particularly interested in horizontal Europeanization dynamics.

According to the EU funded MORE project (Mobility Patterns and Career Paths of EU Researchers) around 15% of researchers working in the EU are currently mobile, but the percentage doubles to 31% if we look at all researcher who experienced at least a three month stay in another country in the last ten years in their post PhD career (MORE2, 2013). Higher education and academic research, then, seem to represent a field particularly interested in horizontal Europeanization dynamics, as intra-EU mobility is more than double than in the general population. Particularly, academic mobility fluxes move from Southern and Eastern to Northern and Central European countries (Ackers and Gill, 2008; Minneci, 2015). Mobile academic researchers are characterized by high social and cultural capital. They also have high levels of education, which existing surveys positively correlate with the feeling of 'being a European citizen' (cfr. Díez Medrano, 2003). For all these reasons, academic researchers are at the forefront in experiencing a professional and personal life "beyond borders" (Recchi, 2015). Cultural factors and structural factors converge in creating "pull" factors promoting their mobility and in insert them among the "pioneur", "the Pioneer of European integration (Favell and Recchi, 2009), that is, among the "winners" of EU integration (Flingstein, 2008). They are expected to hold the necessary level of social, cultural and professional capital to take advantage of the removal of national borders and to live mobility as a multiplier of resources and as an instrument of "horizontal Europeanization" (Mau, 2010).

Indeed, different types of criticisms converge in questioning this quite linear and optimistic interpretation. In-depth analyses suggest that academic mobility of researchers does not exclusively fit in a horizontal dynamic. Also a vertical dimension exists. Mobility is higher from central and northern countries (Denmark and Switzerland, 53%; Netherland, 46%; Germany, 45%; Norway, 43%; Finland, 42%), lower from southern countries (Greece, 34%; Spain, 32%; Portugal, 27%; France, 26%; Italy, 25%) and even lower in eastern countries (Franzoni et al., 2012). Also shifting the attention to the countries of destination we find great disparities. While the USA is still the major country of destination for European researchers (11%), among European countries incoming mobility is higher in the UK and Germany (11% for both) and in France (8%), and lower in Italy (4%) and in Spain (3%). As a result, foreign researchers and engineers in Italy

BRAINS AND BODIES ON THE MOVE 73

account for only the 3% and 7.3% in Spain, while the incidence of foreign researchers<sup>24</sup> is 32.9% in UK, 23.2% in Germany and 17.3% in France (*ivi*). Overall, the stock of researchers who leave countries such as Italy (16.2%) and Spain (8.4%) is greater than the stock of researchers coming from other countries, while outgoing and incoming flows are quite balanced for the UK, Germany and France.

Due to the interaction of structural factors (economic competiveness, investment in higher education and research) and cultural factors (economic and cultural openness, language, cosmopolitan attitudes) researchers from some countries are more mobile than other and some countries are more internationalized than other. As a result, it seems that behind the myth of free movement, as an instrument of horizontal Europeanization, we can detect a 'brain drain' from the southern to northern EU countries.25 It's not surprising that 70% of Italians who experience mobility, compared to the 33% in OECD states, are high skilled. They represent the most dynamic, innovative and qualified sector of the young population but they express particularly low expectations in terms of career opportunities, social mobility perspectives, and benefits regarding their professional positions in their countries of origin (MORE2, 2013; Ackers, 2010). As a result of the negative perception about their professional (and, by the way, for their personal and familiar) future in their country, highly skilled youth from countries such as Italy, Spain, Portugal, and Greece, experience mobility in order to seek opportunities they do

In the collection of these data, the authors also include engineers.

<sup>25</sup> It's worthy to mention that the south/north divide and the consequent brain drain phenomenon does not affect all Southern Countries in the same degree. The divide depends on the different opportunities provided by the national system in terms of PhD and PhD positions. In Italy, reforms and cuts in public expenditure in higher education and research (-22.5% from the beginning of economic crisis) has turned into a dramatic decrease in PhD positions (from 12,338 to 9,189, corresponding to a 25% decrease in one year, from 2013 to 2014), and to a harsh decrease of opportunities and a deterioration of the perspectives for precarious researchers (Toscano et al 2013). The cut in public expenditures happened after several years of stagnation. On the contrary, Portugal invested in higher education and research, and especially in creating opportunities for younger scholars. As remarked by Heitor et al., Portugal "overtook countries that historically had always invested more in R&D, amongst those Italy and Spain, with 1.26%" and "two decades of public funding for the advanced training of human resources and laying down new scientific institutions has started to bear fruit". Yet, Portuguese Universities succeed in attracting young researchers from abroad (Heitor et al. 2014). Nonetheless, as in other Southern European countries, Portugal is characterized by a dramatic restriction in the possibility of accessing permanent academic positions.

not find in their own countries. This kind of phenomenon, looking to the collective dimension, seems to fit into the 'brain drain' narrative, as it represents an "individual advantage", paid with a "loss of the country's highly qualified human capital that, in Europe, benefit countries such Germany and the United Kingdom, at the expense of countries like Spain, Greece, Portugal, Italy" (Milio et al., 2011: 3).

#### **Brain and bodies**

In this section, we focus on the actual experience of the mobile Europeans, with the aim of bringing nuance to the analysis of mobility and Europeanization. We argue in favour of considering the mobile researchers in their concrete experiences of embodied mobility, rather than only in the abstract circulation of their brains; we also highlight opportunities and constraints that mobile researchers face in their everyday intra-European mobility.

The main data source is a dataset of interviews addressing female researchers, both relocated and mobile. <sup>26</sup> Just as it occurs in other economic sectors, women are under-represented in the apical positions and, more specifically, in the tenured staff, as the European documents acknowledge. Moreover, women are more likely to experience long years of precarity and to drop out, also due to family reasons (leak pipeline) (see Jons, 2011; Leeman, 2010; Vohlídalová, 2014). In the interviews, we adopted the perspective of participatory action research: a process during which the knowledge of the researcher and that of the interviewee are both mobilized to co-produce knowledge. <sup>27</sup> In this frame, we were not interested in comparing female and male frames — on the contrary, we were interested in exploring the specific gendered production of meanings and knowledge.

Our interviewees explained the ambivalent status of their choice, proudly claiming it as a way of improving their career, and, at the same time, forced mobility due the lack of opportunities in their countries of origin. The actual experience of mobility is characterized by brightness

The 25 interviews address female researchers (age: 30-40), moving from Southern (Italy, Portugal) and Eastern European (Romania) to Central and Northern European countries, and were carried out between 2012 and 2014. For reasons of anonymity, interviewees are identified by their initials (name).

For a discussion on participatory action research in relation to the academic researchers, see Giorgi and Piazza 2010.

and shadows: new interactions and loneliness, career improvement and a sensation of exile. In other words, the narratives switch constantly between the positive experience of the 'cosmopolitan expat' and forced exile of the 'economic migrant', passing through the identities mentioned above. This ambivalence clearly emerges in the words of S., who, in her mid-thirties, experienced twice the within-country migration processes (from her town of origin to the city in which she graduated, and again to another city for her PhD) and twice cross-country migrations (during her PhD and, later, for her Post-doc, which now turned into a permanent position). When she arrived in the city where she currently lives and works, the long relationship she had at the time collapsed, because the partner decided not to move. <sup>28</sup> Currently she is involved in a proximity relationship.

I am a migrant, even though I'm not the classical migrant. I am privileged, I have money, I have a status... Nonetheless, mine was not a voluntary choice, but something I needed to adapt to. And it has required all my emotional resources [...] Then, the relation between these two dimensions plays a role — between the privilege and the lack of opportunities in your country of origin, because of the lack of the adequate structural and economic conditions. And the relation between these two dimensions is a political relation [...] When I put my situation in a collective perspective, I say to myself that I do not have the right to groan. Then again, when I think about my personal situation... I feel sorrow (S.)

The description of the individual identity of mobile workers is made complex by the difficulty in framing the experience of mobile workers in the traditional job categories, with respect to wage, status, and job certainty.

In the evaluation of the shortcomings of mobility, our interviewees also underline the gender dimension. Mainly, though, inequalities between men and women in academia are narrated as being related to the general academic context. Particularly successful, V. works in a male-dominated academic field: after her PhD in Italy (for which she experienced within-country mobility), she worked for a while in the private sector before deciding, unsatisfied with her job, to come back to the academia, moving to a northern European country where she obtained a permanent position. At the time of the interview, she was in a

Here, we report only the main mobility experiences of our interviewees, for reasons of space.

long-distance relationship that collapsed after a while — and she is currently involved in another relationship in the country where they both live.

Usually, it's a gendered thing, right? The man finds a job, moves abroad, and the woman follows him. But, now, you know... Considering our fields of expertise, I've more chances in the job market (V).

The literature deals with us, young intellectual, middle class, who bring and move everything, and we move again and it does not take into account gender nor age (S2).

In her late thirties, S2 moved from her country to a northern European country during her PhD, then came back to her country and moved again to another continent, for a post-doc. At the time of the interview, S2 was in the process of deciding whether to stabilize in the new country (with her partner) or come back without her partner (which she eventually did). Currently, she holds a temporary appointment in her country of origin (in a different city than her new partner).

Frames and narratives are also shaped by the specific evaluation of what is mobility: most of the interviewees describe mobility as a constant feature of life — in the researchers' imaginaries, there is the idea that mobility is a transitional situation — an 'in between' of more stable conditions — but likely to occur multiple times during a lifetime. A distinction should be made between mobility and relocation: due to the current job market contraction, mobile researchers are likely to move a lot before finding a permanent position. Therefore, the situation in which the researchers prefer to commute is not rare, relocating only when a permanent position is on the table (see also Minneci, 2015). Cross-borders mobility is characterized by multiple profiles of bi-polar (city of job *versus* city of love and family relationships, for example) or multi-polar mobility where the same notion of place change, redefining as a relational structure which is composed of various social relationships of differing scopes (Bittner et al., 2007).

In this perspective, mobility fosters mobility, and researchers' cross-bordering practices are in fact structural conditions of their lives. Researchers are — in fact — European citizens. Nonetheless, Europe makes it difficult.<sup>29</sup> As explained before, European policies supporting mobility are indeed shaped by the underlying assumption of relocation, rather than mobility. Therefore, there is scarce attention to mobility

service that may support a ubiquitous life between the borders. It is not surprising then, that when asked about tools and institutions supporting their mobility, researchers mention private companies and services (low cost airlines and transports, short term online rental services such as AirBnB and the like) rather than the public institutional services. In relation to this, mobile researchers' evaluation of mobility conditions is strictly related to the city/cities in which they live, rather than to the country or states.

Another interesting feature we want to highlight, beside the self-imaginary of mobile researchers and the difference between relocation and mobility, is related to the consequences of the researchers' perceptions of mobility with respect to their social and civic commitment. The living on the border, despite its structural character, is mainly perceived as a temporary/transitional situation: therefore, the emotional investment, and the participation in the public and political life of the country-of-job are 'postponed' to a time in the future when, hopefully, the country-of-job and the country-of-life can be the same.

#### Low-cost love

Indeed, when asked about what is 'home' for you the researchers pointed out the difficulties in defining what is 'home' in a situation of constant mobility. More specifically, 'home' is related to emotional maps, connecting dots all over Europe (and beyond). Having frequently experienced relocation, and currently living in a new continent, S2 explains:

Then again, the answer to this question really changes, everyday — in my head, home is [city of origin], home is feeling, emotions but also that physical space. Then again, when you are gone [...] home are also the small habits you develop and then, what you see when you go for a long time, is that, at some point, you have to let it go [...] I realize that [country of origin] still matters to me, and this makes it impossible for me to feel at home here (S2).

<sup>&</sup>quot;Europe is not ready to manage these mobility fluxes" (A2) — "Europe does not exist, in relation to that [...] to have some kind of policy would be enough" (S.). In her mid-thirties, A2 constantly moves between three European countries (her country of origin, where her partner lives, another European country, where she works, and a third country where she acts as a consultant for a project), facing bureaucratic complications. A. is the "voice" of the interviewer, in the participatory action research perspective we discussed in the first section.

Mobile researchers often live long-distance relationships: the studies dealing with non-cohabiting relationships (Living Apart Together, Levin and Trost, 1999) rarely (if ever) considers the nuances of togetherness and apartness — as clearly argued, for example, by Stoilova et al. (2014), who, moreover, suggest to use the more neutral concept of 'Living Apart Relationships' (LAR). Exploring how researchers conceptualize LAR sheds light on an often-overlooked aspect in the 'brain drain/circulation' narratives, which is the fact that researchers have bodies as well.

Moreover, in a LAR it means that one of us [...] has to drop everything and follow the partner, hoping that the relationship will work. And I discovered that I was really dependant — because, I mean, the literature says that with the migration there is the social death and, you know, it's true... (S2).

The partner is new and familiar at the same time and intimacy is continuously renegotiated and redefined. The periods of separation are mediated by devices (like Skype, Facebook, mobile phones) that allow a constant communication and, at the same time, mediate the relationship, somehow de-coupling 'brain' and 'body'. An ambivalent relationship with these devices emerges, in their unexpected and complex intervention in the love relationship.

Moreover, the promise of ubiquity is in fact a reality of physical detachment: In order to speak on Skype with my partner I have to sit at my computer. Indeed, even though Internet transports my voice wherever I want, my body is required to sit and all my attention is devoted to the mediating device. Even though my body is here, my mind is there — and it cannot be in two places at once, no matter how I try, as this excerpt exemplifies. A. is in her late thirties, and at the time of the interview was involved in a long-distance relationship:

If I have to be at my computer to speak with you every night, it means that I cannot have friends here — it requires my complete attention. Had he lived here, it would have been different. We could go out with friends — together. Right now, it's mutually exclusive (A.)

In a LAR relationship, the presence of the partners in each other's lives is indeed quite relevant. The couple is an anchorage and for this reason, it is put under a lot of pressure. M. relocated for her PhD, during which she knew her current partner — after the defense of her PhD

thesis, she moved to another continent for a post-doc, during which both she and her partner successfully applied for temporary positions in the same city — in a third country of Southern Europe — and, subsequently, they were able to got two permanent positions in a Northern European country (even though in two different cities).

It is easier when you don't move alone, clearly. I mean, there's no debate on that. It's much easier to face the logistical and the psychological hurdles of moving from one country to another with your partner rather than not, it's naturally...it's easier to rely and to split the work and everything that is required to make a new house and...you know from the material, you know, condition of building a material home, finding a new place, all this is quite complicated, to the psychological support that you need in moving into a new place. On the other hand, I must say that moving around does also put a lot of stress on the relationship because, as I was saying before, since you don't have other friends, right? Since you don't have other people to talk to, there's a lot of pressure on the relationship. Because there's no circle, there's no family, there's nothing out there, right? So it's tricky. It's better, clearly, it's easier — but on the other hand we must be careful because when there's only the other one you can venture to reveal your fears or whatever else is caused by the move the relationship is also affected, right? (M)

Everything has to be scheduled in advance, so it becomes a high emotional investment right from the beginning — at least for the mobile one. The same goes for the 'life imaginaries' and mutual expectations. Indeed, LAR becomes even more problematic when the time of the couple is de-synchronized, meaning when there is a non-mobile partner. In this case, tensions emerge with relation to the integration of different rhythms — of life, work, friendship and relationship. In a couple living at distance, there is not the possibility of 'taking it slowly' (see also Giorgi and Raffini 2015).

The many temporalities of LAR also interact with the spatial dimension. First of all, the private space is continuously changing between the 'couple's space' and 'the personal space'. The spatial dimension is, in turn, strictly related to the economic dimension, which is crucial for the possibilities of intimacy — whether or not it is possible to have a private apartment, or to move frequently — and therefore shapes the conditions of LAR. It not only intervenes in the forms of intimacy, it also plays a role in the rhythm of the relationship. Speaking of her living apart relationship, A. observes:

Well, it means that maybe I would prefer to stay at home, because I'm sick, but I can't because I already booked the flight...or I would like to see you because we need to talk, but it's too expensive... (A.)

At the same time, mobility has the unexpected effect of allowing the exploration of new forms of intimacy and balances, both within and outside the couple.

When you've been in a place let's say for three, four, five years, then you make a life there. And friends are your family, right? They provide support and they substitute for whatever your family would otherwise provide (M.).

I have something to fix at home and I cannot do it and it would be good to have a fiancé, a partner, someone to whom you can ask to do it when you can't do it. Also, you know, pay the taxes and, more broadly, managing a life on your own is difficult! And unfortunately we are not able to create an alternative, because maybe I do not need a fiancé, maybe I only need a community and that, we don't have that anymore. We were thinking about co-housing, something like that, because maybe this is the solution to the emotional blackmail, or to the fact that you look for the support and the sharing dimension within a couple that maybe you would like to manage in a different way [...] Yes we are doing that. We had a sort of a car sharing, now we do it with the bikes...a new welfare (A).

While M. frequently experienced relocation in different countries and cities, at the time of the interview A. only moved for short periods (except she now moved to a Northern European country): nonetheless, they both emphasize the relevance of the informal welfare of friends, which has an increasingly important role in the strategies and the conditions for mobility, becoming the functional equivalent of the family.

In this section we focused on the individual experiences of researchers. Of course, the material is rich and deals with a variety of issues: here, we touched upon some key elements that may suggest nuance of the analysis of the process of Europeanization and the positive European narrative on researchers and mobility. Indeed, from these individual experiences outlined we see the ambivalence of mobility. Summarizing one of the interviews, and speaking about her own experience, A2 affirms:

You are compelled to continuously rethink yourself, your future, the endless possibilities... you need to live and manage the uncertainty. I mean, interesting, for sure but - it's really a mess (A2).

Especially, for researchers. With an enlightening excerpt, S2, who is still juggling, three years after the first interview, concludes:

You know, it's always that: potentially, everything will be ok or just not. Maybe I will come back, I'm able to get this temporary job and I'm ok for four years, meanwhile I can look for other opportunities. Or, it's possible that I find nothing and I'll work as a cleaner. This is the point that you never know, you are always at a turning point, but between radically different sceneries (S2).

#### Conclusion — a research agenda

#### a. Beyond the neoliberal rhetoric

Researchers are the most likely candidates for the Europeanization from below (Mau 2010; Recchi 2015). Academic researchers mobility (Cantwell, 2009: Leeman, 2010; Jons, 2011; Vohlídalová, 2014) increased in the last decades, also thanks to the framework developed by the European Union (Ackers and Gill, 2008), as explained in the second section. The importance and the prestige of internationalization and experiences abroad slowly penetrated even in the most protectionist academic systems. Mobile researchers are likely to experience fewer difficulties in relocating, with respect to other categories of workers, because of the powerful infrastructure of European research we described before. Last, but not least, they have high levels of education, which surveys positively correlate with the feeling of 'being an European citizen' (Diez-Medrano, 2003). In other words, Europe comes with the job. On the other hand, intra-European mobility also bears some difficulties: couples living apart, the decrease of permanent positions, which results in frequent relocations, problems in accessing local welfare systems and the nightmare of organizing a pension scheme. Moreover, as we discussed in the third section, the academic job market is experiencing a contraction, also in relation to the neo-liberal turn in the overall system of higher education in Europe.

Behind the increase of academic researchers' mobility we find the effects of a complex combination of cultural and structural variables, acting as push and pull factors. Academic mobile researchers are both members of the "Erasmus Generation" and members of the "Precarious Generation" (Raffini, 2014). They move, pulled by their transnational habitus, the loosening of EU internal borders, and in the framework of

various initiatives of the European Commission, aimed at promoting the Europeanization of higher education and academic research. Indeed they also experience mobility pushed by professional and economic reasons. They feel pushed by structural conditions to experience mobility, to project professional trajectories attuned to their skills and their expectations and at the same time, they have the social and the cultural resources to look to Europe as a natural horizon where to project their personal and professional live, as a place to settle, to work and to build a family. The radical uncertainty about the future also involves highly skilled individuals. New generations are used to "navigate by sight". They are called to project their life in a kind of "extended present", "dealing with uncertainty, rather than following pre-established routes" (Leccardi, 2014). In this context, where "future collapses into the present", the vertical orientation toward the future is substituted with the search for an alternative present, through mobility (ivi).

Mobility comes with opportunities and challenges. Mobility is an adjunctive, extraordinary tool, in the project of life, but it can also represent the only possibility to nurture hope in building a professional trajectory in line with skills and expectations, in a context marked by precarity and the risks of downward social mobility. Precarious researchers often combine high social and cultural capital with low economic capital. Experiencing mobility even exacerbates this "incongruence of status" (Raffini 2013), as mobility further increases professional skills and widens the transnational networks in which the individual are inserted, but also exacerbates uncertainty. Mobility is also highly expensive, since it implies facing charges for relocation and travel. It has to be considered that often the bi-local experience turns into multipolar experience (Mueller 2015). Mobile, precarious, academic researchers do not live across a border: they live on the borders. They are not "rooted cosmopolitans;" they are "scattered cosmopolitans". In order to grasp the complex balance between risks and opportunities, choice and obligation, as well as to explore the difficult balances between professional and personal/intimate life, we need to move beyond the disembodied — neoliberal — approach, characterizing both the simplistic vision of mobility as an opportunity and as a "moral obligation" and the notion of "brain drain" or "brain circulation". The exploration of the effects of mobility in every-day life and in the construction of social and romantic relations allows identification of the dissonance between representations and practices. Mobility involves bodies, and not only brains, and it originates opportunities but also risks and costs, both economical and emotional. Beside its positive outcomes, it also generates deprivation and distress — and researchers' representations of mobility show the ambivalence of this concept.

Moreover, mobility is in fact an intervening factor in researchers' self-identification. Firstly, it nuances their self-identification as mobile workers, in between privilege and deprivation. Secondly, the everyday practices and experiences of mobile researchers highlight the open issues of Europeanization from below — policies supporting relocation, rather than mobility. Finally, it requires a continuous effort of self-reflection in re-imagining identity, relationships, the future, and strategies. Mobile researchers live 'in between' — countries/cities, here and there, poor migrant and cosmopolitan expat, to name but a few.

#### b. Future Research Agenda

We conclude this contribution by outlining a research agenda that analyses the multifaceted nature of mobility, taking into account its multiple and diverse dimensions. An interesting research trajectory might develop from the work of Sheller and Urry (2006), who have underscored that the social sciences have largely approached movement (of ideas, peoples, things) as a *black box*, a neutral set of technologies and processes permitting forms of economic, social, and political life that are seen as explicable in terms of other, more causally powerful processes (ibid. 208) and launched a research agenda aimed at "tracking the power of discourses and practices of mobility" (Sheller and Urry, 2006: 211).

Following this line, Cresswell's work about the politics of mobility (2010) came up with a definition of mobility as the entanglement of movement, representation, and practice: movement, is "the fact of physical movement getting from one place to another; the representations of movement that give it shared meaning; and, finally, the experienced and embodied practice of movement." (ibid.:19). Of course, understanding physical movement is one aspect of mobility. But this says little about what these mobilities mean or how they are practised. Just as there has been a multitude of efforts to measure and model mobility, so has there been a plethora of representations of mobility. Mobility has been viewed as adventure, as something one may be

 Table 2.1
 Dimensions of analysis of scientific mobility

	Unpacking scientific mobility in the ERA		
Levels/dimensions	Physical movement of researchers from one place to another	Representation of mobility in the ERA	Experience of being a mobile researcher
Questions (inspired by Cresswell 2010)	Who goes where? How often? For how long? Who moves furthest? Who moves fastest? Who moves most often?	How is mobility discursively and materially constituted? What narratives have been constructed about mobility? How are mobilities represented?	How is mobility embodied? How comfortable is it? Is it forced or free?
Empirical objects	Fluxes of "movers" and their features (age, gender, nationality, stage of career, disciplines)	Policies, funding, public debate, actors, programmes, discourses of scientific mobility	Professional, social and political practices related with being a mobile researcher
Methodologies research approaches	Statistics, policy evaluation, mostly quantitative, cross-national, cross-temporal	Interpretive policy analysis, quali-quantitative analysis of a corpus of documents, historical, comparative	

Source: our elaboration, based on Cresswell (2010).

condemned to, as education, as freedom, as modern, as threatening. We can think of the contemporary links made between immigrant mobilities and notions of threat reflected in metaphors of flooding and swamping used by journalists and politicians (Tuitt, 1996; White, 2002), or, alternatively, to the idea of the right to mobility as fundamental to modern Western citizenship which is expressed in legal and governmental documents (Blomley, 1994).

Finally, there is practice; by practice, Cresswell means both the everyday sense of particular practices such as walking or driving and also the more theoretical sense of the social as it is embodied and habitualised (Bourdieu, 1990).

The table 2.1 provides a guide to adapt Cresswell's proposal to the case of scientific mobility in the European Research Area.

The *movement* dimension is still the one most investigated by the scientific literature on the topic, with all the challenges of building solid knowledge in this respect. The *practice* dimension although less often than the previous one, has also been a subject for investigation; to some extent its combination with analyses about *movement* is at the basis of the policy approach of the push and pull factors. The *representation* dimension appears instead largely neglected in the case of scientific mobility.

While would be certainly valuable to develop an analysis that reconnects and simultaneously addresses all three levels, in the future we are particularly interested in the critical exploration of the intersection between *representation* and *practice*. By investigating how the idea and the lived experience of mobility intersect, we aim at exploring the power, as well as the contradictions of the European discourse on scientific mobility. Both power and contradictions seems to emerge from the dissonance between representation and practice suggested by our previous research and research in progress.

In a paper from Italian early stage researchers Carrozza and Minucci (2014) noted how the use of the term "mobility" is associated to a universe of meanings different from those associated with the notion of emigration.

On the one hand, when asked about their opinion on scientific mobility in general, researchers recalled the rhetoric of the European research policies (defining mobility as a right, as the freedom to build a satisfying career by gathering professional and personal experiences in different workplaces and cultures, as a source of value for both the researcher and the European society as a whole); on the other hand, they often contradicted these definitions when asked to describe their personal experience, underlining their uneasiness with what some defined as "forced mobility" and describing their mobility more in terms of a necessity rather than as a choice. The dissonance between representation and practice and the process of reifying mobility (i.e. conceptualizing mobility *per se* and approaching it as something that *exists* beyond the real experiences), suggests in itself the political relevance of the current representation of scientific mobility and the power of mobility discourse.

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